Staff Report for

Item No. 10 Discussion April 28, 2003

To: John H. Robertus Executive Officer

From: Paul J. Richter, P.E. Water Resource Control Engineer Industrial Compliance Unit

Tentative Order No. R9-2003-0008 NPDES Permit No. CA0109185 WASTE DISCHARGE REQUIREMENTS FOR U.S. NAVY, NAVAL BASE CORONADO

The U.S. Navy installations in the San Diego area fall under the *U.S. Navy, Commander, Navy Region Southwest* (CNRSW) command structure and are aligned into three (3) major complexes:

- 1. Naval Base Point Loma,
- 2. Naval Base San Diego, and
- 3. Naval Base Coronado.

A separate NPDES permit has been developed for each complex. Tentative Order No. R9-2003-0008 will regulate the discharges from the installations included as part of the *Naval Base Coronado* (NBC) Complex and is the final NPDES permit for the three Naval Complexes. The Regional Board adopted an Order for the *Naval Base Point Loma* (NBPL) at its September 11, 2002 meeting and adopted an Order for the *Naval Base San Diego* (NBSD) at its November 13, 2002 meeting. The tentative Order for the NBC contains discharge requirements similar to those in the Orders adopted for the NBPL and the NBSD.

The NBC Complex includes the Navy installations listed below:

- 1. Naval Air Station, North Island (NAS North Island);
- 2. Naval Amphibious Base, Coronado (NAB);
- 3. Naval Outlying Landing Field, Imperial Beach (NOLF IB);
- 4. Naval Radio Receiving Facility (NRRF);
- 5. Naval Auxiliary Landing Field, San Clemente Island (NALF SCI);**

- 6. Survival, Escape, Resistance and Escaper Training School (SERE); and
- 7. La Posta Mountain Warfare Training Center (La Posta MWTC).

**The NALF SCI is located in the Los Angeles Regional Water Quality Control Board jurisdictional area. This Fact Sheet does not contain information regarding the NALF SCI facility or any discharges therein.

Point Source

The NBC has various point source discharges and industrial storm water discharges. The *point source* discharges at NBSD are grouped into six general industrial processes:

- 1. Steam Condensate;
- 2. Utility Vault & Manhole Dewatering;
- 3. Engine Cooling/Sprinkler Water;
- 4. Pier Boom Cleaning;
- 5. Miscellaneous Discharges Associated with Facility Maintenance; and
- 6. Pier Cleaning.

Descriptions of the point source discharges are included in the Fact Sheet for the tentative Order. The point source discharges are intermittent or low volume discharges with a low potential threat to water quality. The tentative Order requires monitoring to ensure that the potential threat to water quality is low.

Industrial Storm Water

Industrial storm water discharges occur at three of the six *Installations* at the NBC, and these facilities are covered by Water Quality Order No. 97-03-DWQ (General Industrial Storm Water Permit). The installations are listed below.

- 1. Naval Air Station, North Island (NAS North Island);
- 2. Naval Amphibious Base, Coronado (NAB); and
- 3. Naval Outlying Landing Field, Imperial Beach (NOLF IB).

Provided in the Fact Sheet are the following: a summary of the industrial activities; a brief description of the Navy's storm water working group; a discussion of the USEPA Multi-Sector permit; and a description of certain storm water monitoring analysis data. The NRRF, SERE, and La Posta MTWC do not have industrial storm water discharges.

The industrial storm water discharges from the NAS North Island and NAB have significant levels of copper and zinc. The tentative Order requires the industrial storm water discharges from the NAS North Island and NAB to comply with toxicity specifications within four years of the adoption of the tentative Order. The toxicity limit is a performance goal prior to the toxicity specification being required. During the four-year period before the effective date of the toxicity limit, the U.S. Navy proposes to conduct a study of the toxicity in storm water discharges from all areas of NAS North Island and NAB at which industrial activities are undertaken. The Navy

shall recommend a scientifically valid survival rate for acute exposure to discharges of storm water from industrial areas at NAS North Island and NAB.

The tentative Order requires additional monitoring of the industrial storm water discharges if the concentrations of copper exceed $63.6 \,\mu\text{g/L}$ or if the zinc concentrations exceed $117 \,\mu\text{g/L}$. The Navy is allowed time to modify and implement changes to its Storm Water Pollution Prevention Plan (SWPPP) prior to resampling.

Hull Coating Leachate, Underwater Husbandry, and Radioactivity

The regulation and monitoring of hull coating leachate, and underwater ship husbandry do not need to be included in the tentative Order. Hull coating leachate and underwater ship husbandry will be regulated pursuant to the *Uniform National Discharge Standards for Vessels of the Armed Forces* (UNDS).

Pursuant to the Federal *Atomic Energy Act*, the Regional Board does not have jurisdictional authority to regulate the discharges of radioactive wastes. The Navy and the Department of Energy have jurisdiction for discharges of radioactive material. The Navy has a quarterly monitoring program for radioactive discharges. The USEPA has also conducted a separate, one-time monitoring program for radioactivity. This Order, therefore, does not regulate discharges of radioactive wastes from Naval vessels or from nuclear support facilities.

A memorandum by Paul J. Richter, Water Resource Control Engineer, dated July 22, 2002 was written regarding hull coat leachate, underwater ship husbandry, and radioactive discharges. The memorandum identifies the regulatory processes for discharges of hull coating leachate, underwater ship husbandry, and the monitoring processes and oversight of radioactive discharges being conducted by the Navy and USEPA. The memorandum is included with the Fact Sheet in the agenda package.

Toxicity Requirements

The tentative Order provides protection of water quality equivalent to the protection provided by the NPDES permits for the shipyards along San Diego Bay. The tentative Order implements similar requirements that were adopted for the NBPL permit and the NBSD permit. The following requirements are included in the tentative Order:

- 1. The industrial storm water toxicity requirement allows the NAS North Island and NAB four-years to achieve compliance with the 90% survival 50% of the time effluent limitation.
- 2. During the four-year period before the effective date of the toxicity effluent limitation the U.S. Navy shall conduct a study of the toxicity in storm water discharges from all areas of NAS North Island and NAB at which industrial activities are undertaken and shall recommend a scientifically valid survival rate for acute exposure to discharges of storm water from industrial areas at NAS North Island and NAB. The study may include a Toxicity Identification Evaluation (TIE), or a Toxicity Reduction Evaluation (TRE).

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- 3. Industrial storm water discharge requirements are incorporated into the tentative Order. The requirement to resample the industrial storm water discharges upon finding high levels of copper or zinc allows the Navy time to adjust its best management practices (BMP) and storm water pollution prevention plan (SWPPP) prior to resampling the industrial storm water discharge. The tentative Order requires quarterly submittal of monitoring data when high concentrations of copper or zinc are found.
- 4. The tentative Order requires the NAS North Island and NAB to terminate the first ¼-inch of industrial storm water discharges from high-risk areas no later than two years after the adoption of the Order. The requirement to terminate the first ¼-inch of runoff from the high-risk areas is the same requirements for the commercial shipyards in the San Diego Bay.
- 5. Utility vault discharge requirements are incorporated into the tentative Order.

Availability of the tentative Order

The tentative Order was mailed on March 7, 2003. This Item was originally scheduled for the April 9, 2003 Regional Board meeting. By letter dated March 19, 2003, the U.S. Navy asked for a 30-day extension of the public comment period. By letter dated March 28, 2003, the Regional Board Executive Officer notified the U.S. Navy and interested parties that the hearing for the tentative Order was rescheduled for the May 14, 2003 Regional Board meeting.

Comment letters

Two comment letters were submitted and are included in this agenda package. A response to the comments will be provided in the 2nd mailing to the Regional Board for this Item. The U.S. Navy submitted comments by letter dated March 26, 2003. The Environmental Health Organization submitted comments by letter dated April 25, 2003.